

RAIL ATLAS EUROPE



RAIL ATLAS EUROPE



Zeichenerklärung

Eisenbahnen

zweigleisige Strecke 1435 mm / Streckennummer	
eingleisig 1435 mm / Streckennummer	
Schmalspurbahn	
Breitspur 1520, 1600, oder 1668 mm dto. eingleisig	
außer Betrieb	
Zahnradbahn	
Privatbahn	
Museumsbetrieb / Draisinen	
im Bau / geplant	

Elektrischer Betrieb

Wechselstrom 15 kV 16,7 Hz (Staatsbahn / Privatbahn)	
Wechselstrom 25 kV 50 Hz	
Gleichstrom 600 - 1500 V (Staatsbahn / Privatbahn)	
Gleichstrom 3000 V (Staatsbahn / Privatbahn)	
Systemwechsel	

Stationen

Bahnhof, Haltepunkt, Haltestelle	
Rangierbahnhof, Zugbildungsbahnhof	
Umschlagbahnhof (Container)	
Umschlagbahnhof (Huckepack)	
Logistikzentrum	
Holzverladung	
Umspuranlage	
Werkstätte, Depot	

Sonstiges

Staatsgrenze	
Steinbruch, Bergwerk	
Fähre	
Straßenbahn	
Standseilbahn	
Bewegliche Brücke	
U-Bahn, Metro	
Flughafen mit IATA-Code	
Eisenbahn-Museum	
TEN-Achse	
PAN-Achse	

légende

chemins de fer

double voie 1435 mm / numéro de ligne	
voie unique 1435 mm	
chemin de fer à voie étroite	
ligne à écartement large: 1520, 1600, 1668 mm dto., voie unique	
ligne non exploitée	
chemin de fer à crémaillère	
chemin de fer privé	
chemin de fer touristique / draisine	
ligne en construction / projetée	

traction électrique

courant monophasé 15 kV 16,7 Hz (chemin de fer d'Etat / chemin de fer privé)	
courant monophasé 25 kV 50 Hz	
courant continu 600 V - 1500 V (chemin de fer d'Etat / chemin de fer privé)	
courant continu 3000 V (chemin de fer d'Etat / chemin de fer privé)	
limite système	

gares

gare, point d'arrêt, halte	
gare de triage	
gare intermodale (container)	
gare intermodale (transport combiné rail-route)	
gare marchandises	
chargement de bois	
installation de chargement d'écartement	
atelier, dépôt	

renseignements divers

frontière nationale	
carrière, mine	
bac	
tramway	
funiculaire	
pont amovible	
métropolitain, métro	
aéroport avec code IATA	
musée de chemin de fer	
TEN essieu	
PAN essieu	

legenda

ferrovie

doppio binario 1435 mm / numero di linea	
binario semplice 1435 mm	
scartamento ridotto	
linea a grande scartamento dto., binario semplice	
linea chiusa al traffico	
ferrovia a cremagliera	
ferrovia concessa	
esercizio storico / draisina	
linea in costruzione / progettata	

trazione elettrica

corrente alternata 15 kV 16,7 Hz (ferrovia dello stato / concessa)	
corrente alternata 25 kV 50 Hz	
corrente continua 600 - 1500 V (ferrovia dello stato / concessa)	
corrente continua 3000 V (ferrovia dello stato / concessa)	
cambiamento di tensione	

stazioni

stazione / fermata	
smistamento, fascio di binari	
traffico intermodale (container)	
trasporto combinato strada-rotaia	
stazione logistica, railport	
impianto di carico di legno	
impianto per il cambio dello scartamento	
officina, deposito	

altri segni

confine di stato	
cava di pietra / miniera	
traghetto	
tranvia	
funicolare	
ponte rimovibili	
metropolitana urbana, metro	
aeroporto con codice IATA	
museo	
asse transeuropea	
corridoio paneuropeo	

key

railways

double-track 1435 mm / official number	
single track 1435 mm / line number	
narrow gauge	
broad-gauge track 1520, 1600 or 1668 mm dto., single track	
line not in use	
rack railway	
private railway, not in use by state	
touristic line / line not in use by state	
line under construction / planned	

electric operated lines

alternating current 15 kV 16,7 Hz (state railway / private railway)	
alternating current 25 kV 50 Hz	
direct current 750 - 1500 V (state railway / private railway)	
direct current 3000 V (state railway / private railway)	
change of voltage	

stations

station, halt, stop	
marshalling yard	
intermodal station (container terminal)	
combined rail-road transport	
logistic station	
station with timber loading	
gauge conversion	
workshop, motive power depot	

special signs

national border	
quarry / coal mine	
ferry, railway ferry	
tramway	
cableway	
moveable railway bridge	
underground, municipal metro	
airport with IATA code	
railway museum	
TEN-T-axis	
PAN-axis	

- Navigation with the future Galileo satellite system
- Energy (TEN-Energy)
- Telecommunications (eTEN)
- Information Systems (GIS)

The European Council approved the first 14 TEN-T projects in 1994. Guidelines were established for TEN-T in 1996 (Decision No 1692/96/EC of 23 July 1996, amended by Decision No 1346/2001/EC of 22 May 2001 and Decision No 884/2004/EC of 29 April 2004). Since 2001 TEN-T includes not only all modes of transport, but also traffic management systems. By 2020 a rail network of about 94,000km, an inland waterway network of approximately 11,250km and a road network of around 89,500km will have been created.

Implementation of the TEN-T projects proved very difficult, and by 2003 only about a third of the planned transport network was completed. The guidelines were amended in 2004, and the TEN-T projects should now be more focused and coordinated across Europe. Since 2004 the new list includes 30 priority transport axes and projects, as numbered below:

- 1 Rail axis: Berlin-Verona/
Milano-Bologna-Napoli-Messina-Palermo
- 2 High-speed axis: Paris-Brussels/
Brussels-Cologne-Amsterdam-London
- 3 High-speed railway axis in south-west Europe:
Paris-Madrid
- 4 High-speed axis: east Paris-eastern France-Frankfurt/
Stuttgart-Munich
- 5 Betuweroute:
Maastricht-Kijfhoek-Zevenaar-Emmerich-Oberhausen
- 6 Railway axis: Lyon-Trieste-Divaca/Koper-Ljubljana-
Budapest-Ukrainian border at Chop
- 7 Paris-Bratislava rail corridor
- 8 Multimodal axis: Portugal/Spain-rest of Europe:
Portugal-Spain-France
- 9 Rail axis Ireland: Cork-Dublin-Belfast-Stranraer
(completed 2001)
- 10 Connection to Milan Malpensa Airport (completed 2001)
- 11 Öresund Land Bridge
- 12 Rail/road axis: Nordic Triangle (various routes)
- 14 West Coast Main Line: Edinburgh/Glasgow-Carlisle-
(Manchester or Liverpool)-Crewe-(Birmingham)
-Rugby-London
- 15 Galileo satellite navigation
- 16 Railfreight axis: Sines/Algeciras-Madrid-Paris
- 17 Rail axis: Paris-Strasbourg-Stuttgart-Munich-Vienna-
Bratislava/Budapest
- 18 Inland waterway, Rhine-Danube: Rhine/
Meuse-Main-Danube
- 19 High-speed axis (interoperable) in Iberian peninsula

- 20 Rail axis: Fehmarn Belt
- 21 'Motorways of the Sea', including Nord-Ostsee-Kanal
- 22 Rail axis: Athens-Sofia-Budapest-Vienna-Prague-
Nuremberg/Dresden
- 23 Rail axis: Gdansk-Warsaw-Brno/Bratislava-Vienna
- 24 Rail axis: Lyon/Genoa-Basel-Duisburg-Rotterdam/Antwerp
- 25 Motorway axis: Gdansk-Vienna
- 26 Rail/road axis: Ireland/United Kingdom/continental Europe
- 27 'Baltic rail axis': Warsaw-Kaunas-Riga-Tallinn-Helsinki
- 28 'Eurocaprail' rail axis: Brussels-Luxembourg-Strasbourg
- 29 Rail axis: Ionian-Adriatic intermodal corridor
- 30 Inland waterway: Seine-Schelde

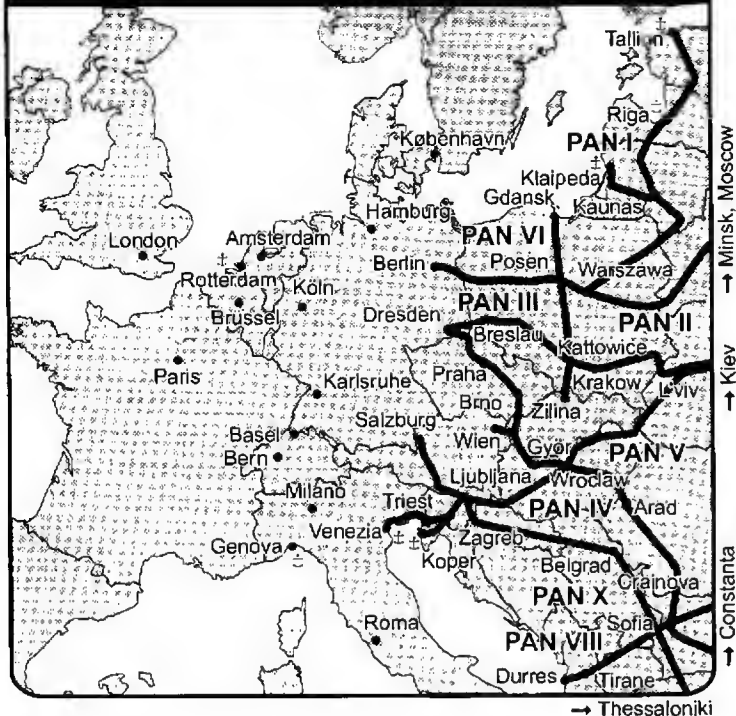
The EU member states have to finance their own country's TEN-T projects themselves, so implementation is highly dependent on the financial strength of the individual countries, although the EU budget provides additional resources. National investment through the European Regional Development Fund (ERDF) and the Cohesion Fund can be co-financed as part of the European transport network. The European Investment Bank and the European Investment Fund can also assist with loans and finance guarantees.

PAN corridors

In addition to the TEN-T projects, pan-European transport corridors were defined by the European Transport Conferences in Crete in 1994 and Helsinki in 1997. Ten major routes connected Europe from the Atlantic to the Volga and from Scandinavia to the Mediterranean. The ten PAN corridors are designated by Roman numerals:

- I Helsinki-Tallinn-Riga-Kaunas-Klaipeda-Warsaw
- II Berlin-Poznan-Warsaw-Brest-Minsk-Smolensk-Moscow
-Nizhny Novgorod
- III Dresden-Milkowice-Wroclaw
(Breslau)-Katowice-Krakow-Lviv-Kiev
- IV Dresden-Prague-Brno/Vienna/
Bratislava-Győr-Budapest-Arad-Craiova-Sofia-Plovdiv-
Svilengrad-Edirne-Istanbul
- V Venecia-Trieste-Koper-Ljubljana-Maribor-Budapest
-Uzhgorod-Lviv-Kiev
- VI Gdansk-Grudziadz-Torun-Zebrzydowice-Zilina
- VII Germany-Austria-Bratislava-Győr-Croatia-Serbia-Rus
-Lom-Constanta
- VIII Durres-Tirana-Skopje-Bitola-Sofia-Dimitrovgrad-Burgas
- IX Helsinki-Wyborg-St Petersburg-Pskov-Kiev-Ljubasewka-
Chisinau-Bucharest-Ruse-Veliko Tarnovo-Kazanlak-Stara
Agora-Dimitrovgrad-Haskovo-Charmanli-Svilengrad-
Alexandroupolis
- X Salzburg-Villach-Ljubljana-Zagreb-Beograd-Nis-Skopje
-Veles-Thessaloniki

PAN corridors



- 5 Gdynia-Katowice-Ostrava/Zilina-Vienna-Trieste/Koper
- 6 Almeria-Valencia/Madrid-Zaragoza/Barcelona-Marseille-Lyon-Turin-Udine-Trieste/Koper-Ljubljana-Budapest-Zahony (Hungary/Ukraine border)
- 7 Prague-Vienna/Bratislava-Budapest-Athens/Constanta
- 8 Bremerhaven/Rotterdam/Antwerp-Aachen/Berlin-Warsaw-Terespol (Poland/Belarus border)/Kaunas
- 9 Prague-Horní Lideč-Zilina-Kosice-Crerna and Tisou (Slovakia/Ukraine border)

The railfreight corridors partly coincide with the EU-defined Trans-European Networks TEN-T and the PAN corridors. This is especially true for the first of the nine corridors, which corresponds closely to the TEN 24 axis, which, as the 'Blue Banana' urbanisation corridor from North West England to northern Italy, is the strongest economic area in central Europe.

But it will be many years before these freight axes are fully operational. Already the number of free paths for freight trains is determined by the tight timing of passenger trains and long-distance traffic. During the night hours there are not sufficient slots for freight, such as the Middle Rhine Valley (Corridor I = TEN 24). However, there is also the high risk of noise pollution on the historic north-south route used by freight trains, which passes through almost all the towns in the Middle Rhine Valley, while the fast-moving passenger trains on the high-speed line travel away from the towns by the Westerwald. This high-speed line (also part of TEN-T) is completely unsuitable for freight trains because of the steep track alignment, and its use is therefore not permitted.

Hinterland transport to the western ports (Zeebrugge, Antwerp, Rotterdam and Amsterdam, the 'ZARA' ports) faces a similar situation to that of the ports of the north and east. The north-south axis from the

ERTMS corridors

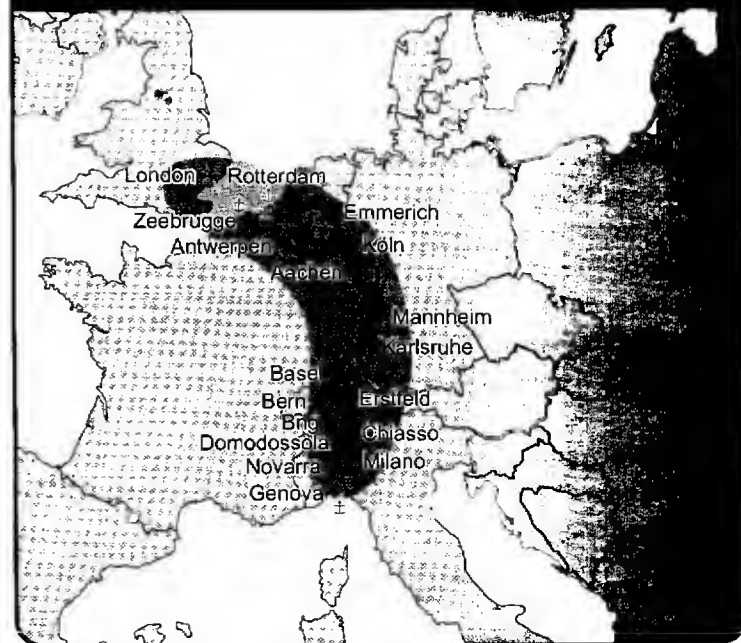
The objective of the European Commission is to replace more than 20 different national train control systems in Europe by the European Rail Traffic Management System (ERTMS). While this system is already successfully used on many high-speed lines and is very successful worldwide, interoperable freight corridors are still not available in some countries. To increase the efficiency and sustainability of freight transport in the EU, six corridors (A-F) have been proposed, which are to be equipped with ERTMS with TEN-T funding.

Freight corridors

The European Commission, which aims to make European rail transport competitive under the four railway directives, has added to Regulation 913/2010, for a competitive European railfreight network, other aims that oblige the member states, and in particular their infrastructure management, to act together. **Nine railfreight corridors were defined, to be set up between 2013 and 2015:**

- 1 Zeebrugge-Antwerp/Rotterdam/Aachen-Cologne-Mannheim-Basel-Milan-Genova
- 2 Rotterdam-Antwerp-Luxembourg-Metz-Dijon-Lyon/Basel
- 3 Stockholm-Copenhagen-Hamburg-Munich-Innsbruck-Verona-Palermo
- 4 Sines-Lisbon/Leixões-Madrid-San Sebastian-Bordeaux-Paris/Le Havre/Metz

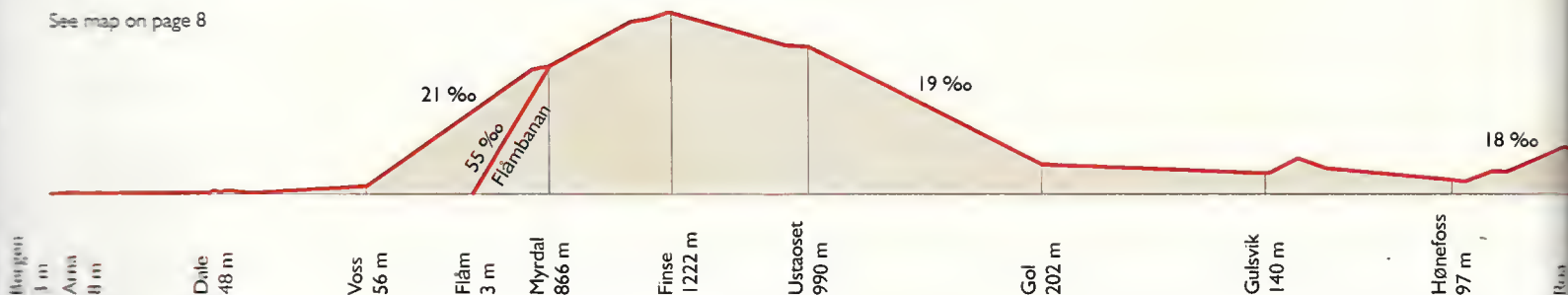
Corridor 1 and the Blue Banana



Bergen Railway / Bergensbanan

Length 471,25 km

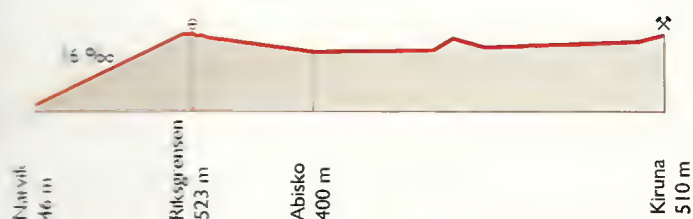
See map on page 8



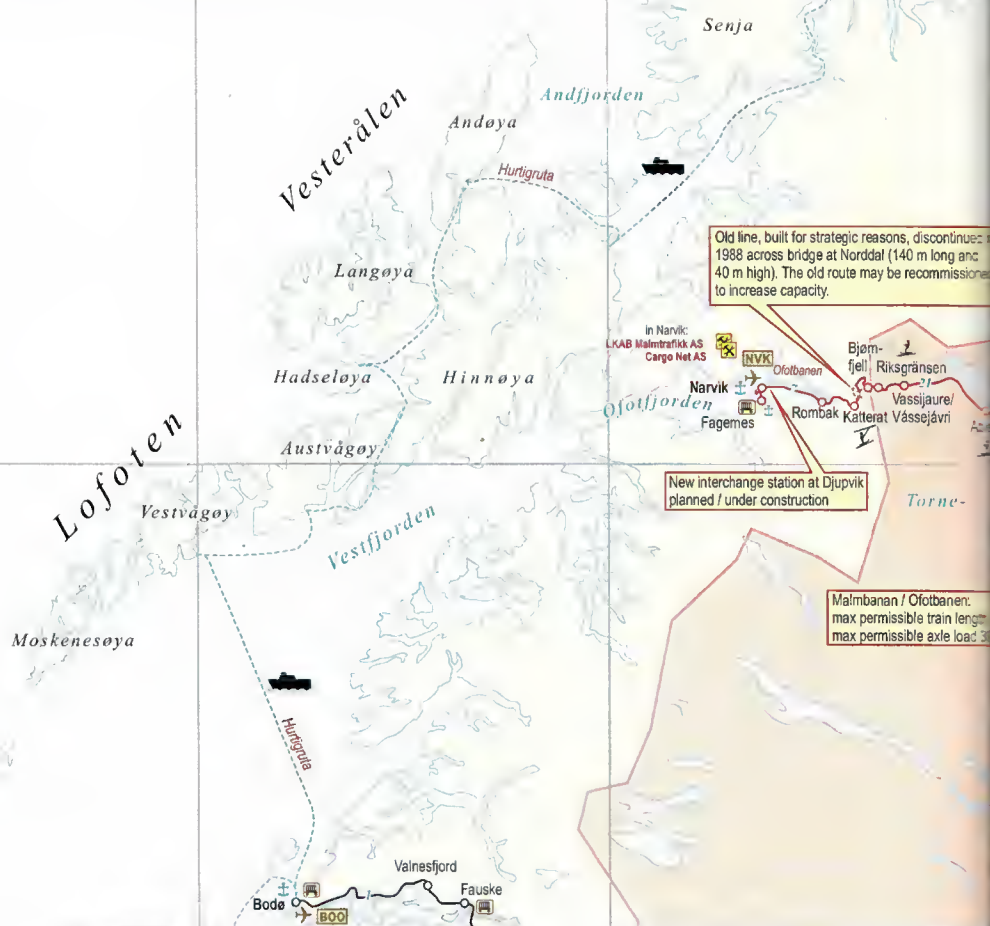
Iron ore line Kiruna - Narvik / Ofotbanen / Malmbanan

Length Narvik - Luleå 473 km

Length Narvik - Kiruna 168 km



Norwegian
Sea



A

B

C

D

Oslo
3 m

NORWAY

Nordkap

Hurignuta

MEH

Barents
Sea

Varangeri

Industrial railway Kirkenes - Bjørnevatn
to the steel plant near Kirkenes

Inarijärvi

Inari

FINLAND

The town of Kiruna will be moved 5 km to the east c. 2020 because of the continuing underground ore mining at Erzberg Kirunavaara and the resulting surface damage in the town. The new stretch of line was built in 2012, to divert the railway round Kiruna and the mining at Kirunavaara.

SWEDEN

Rautuvaara

Kaunisvaara
Sahavaara

PJA

Pejala

Kemijärvi

Storuman

A

Luleå

B

5

Tornio

C

Laurila

D





Iron ore line (Malmbanan):
max permissible train length 750 m
max permissible axle load 30 t
(Track Class G)

Norrbotten line extension
to Luleå planned / delayed
until 2025





Iron ore line (Malmabanen):
max permissible train length 750 m
max permissible axle load 30 t
(Track Class G)

out of service

Norrbotten line extension
to Luleå planned / delayed
until 2025



FINLAND
SUOMI



RUSSIA
ROSSIJA



White
Sea

Norwegian Sea

NORWAY



to Flåm
55‰
Flåmsbanen
Kjosfossen
Reinungen
55‰
to Oslo
to Bergen
Myrdal (866 m)
Bergensbanen

Loops of the
Flåm Railway
near Myrdal

Vestfoldbanen partly
two-tracked, double-track
for entire line under
construction

Skagerrak



SWEDEN

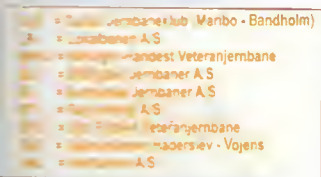


Inlandsbanen (Mora - Lomsmyren - Vansbro - Lesjöfors out of service, Vansbro - Vika, Lesjöfors - Våtern partly bicycle handcar)

Östergötlandbanen: additional double-track line planned (Ski - Follöbanen partly in tunnel) in operation ca. 2019

Edensson planned ETCS Lev. 2

Possebanan: new line to Årstad planned









A

Haapajärvi

7

Sillinjärvi

B

Joensuu

C

Säkämäki

Varesila

D

FINLAND
SUOMIHELSINKI
HELSINGFORS

Project Rail Baltica:
Projected Railway line (TEN 27) from
Warsaw via Kaunas and Riga to Tallinn
with connection to Helsinki by ferry or
tunnel.
(Agreed in Wismar 2001, open ca.
2023). Entire length ca. 940 km normal
gauge (1435 mm), aimed top speed
250 km/h.

TALLINN

ESTONIA

RUSSIA

Lake Peipus

TEN 27
PAN I



Baltic Sea

LATVIA



RUSSIA

POLAND



Koszalin

24

Tczew

C

Elbląg

D

Olsztyn

Saaremaa

Gotland

Hesselby
891 mm
Munkebo

Ventspils

Ventspils-2

Ugāle

Spāre

Stenča

Liepāja

Bugeniai

Māzeikā

Skuodas

Plungė

Kretinga

Klaipėda

Draugystė

Šilutė

Pagėgia

Sovetsk

Svetlogorsk 2

Svetlogorsk 1

Zelenogradsk

Pionerskij

Baltiysk

Baltiyskiy Les

KALININGRAD

Cernyakhovsk

Gvardeysk

1435 + 1520

Bagrationovsk

Mamonovo

Sassnitz → Baltiysk



24

A

Tallinn

Tallinn

B

Tapa

13

C

St. Petersburg

D

ESTONIA



RUSSIA



Rīgas līcis

Gulf of Riga

Saukrasti

Skulte

Valmiera

Cēsis

Sigulda

Vangazi

Bolderāja

Jūrmala

Kemeni

Rīga

Sloka

Tukums

Cena

Jelgava

Glūda

Meitene

Joniškis

Naujoji Akmenė

Akmenė

Kūžiai

Pakruojis

Šiauliai

Tytovėnai

Kėdainiai

LITHUANIA

TEN 27
PAN I

Jonava

Rizgony

Kaišiadorys

Kaunas

Palemonas

Kazlų Rūda

Manjampolė

Kytana

Veseris

Mookava

Seštoka

Alytus

Trakai

Vaidotai

Stasylos

Banyakone

VILNIUS

Šumskas

Bezdonys

Pabradė

Švendionėliai

Utena

Rokiškis

Obelait

Eglaine

Daugavpils

Krašlava

Indra

Krāce

Rēzekne-2

Rēzekne-1

Vijāni

Līvāni

Krustpils

Aizkraukle

Plavinas

Veneta

Jaunkalsnava

Madona

Gulbene

Alūksne

SIA 750 mm

Gulbene

Pytalovo

Kārsava

Ostrov

Pechory

Koidula

Orava

Põlva

Elva

Viljandi

Lugazi

Valga

Valmiera

Cēsis

Sigulda

Vangazi

Bolderāja

Jūrmala

Kemeni

Sloka

Tukums

Cena

Jelgava

Glūda

Meitene

Joniškis

Troškunai

Anykščiai

Rubičiai

Utena

Ignalina

Dūkštas

Turmantas

Kūrcums

Eglaine

Obelait

Rokiškis

BELARUS



Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

Minsk

ATLANTIC OCEAN

Outer Hebrides

Isles of Lewis

Uist

Isle of Skye

Kyle of Lochalsh

Mallaig

Arisaig

Glenfinnan

Isle of Mull

Connemara

Oban

Jura

Islay

Wemyss Bay

Adrossan Harbour

Holy Island

Larne Harbour

Girvan

Stranraer

UNITED KINGDOM



NORTHERN IRELAND

IRELAND



EIRE

Ballina

Sligo

Westport

Manulla Junc.

Carrick-on-Shannon

Shannon

Longford

Portadown

Belfast

Adelaide

Bangor

Inch Abbey

Ballydugan

Halt

Downpatrick

Liverpool

IRISH

Snaefell Mountain Rly
1067 mm (3'6"), 550 V DC
120 % Fall system

Isle of Man

Snaefell (607 m)

Isle of Man Steam Rly

Port Erin

914 mm

A

B

Athlone

Dublin

18

C

Dublin

D

A

B

C

D

Orkney
Islands

NORTH SEA

GDOM

SCOTLAND

ENGLAND

A Carlisle

Liverpool

Leeds

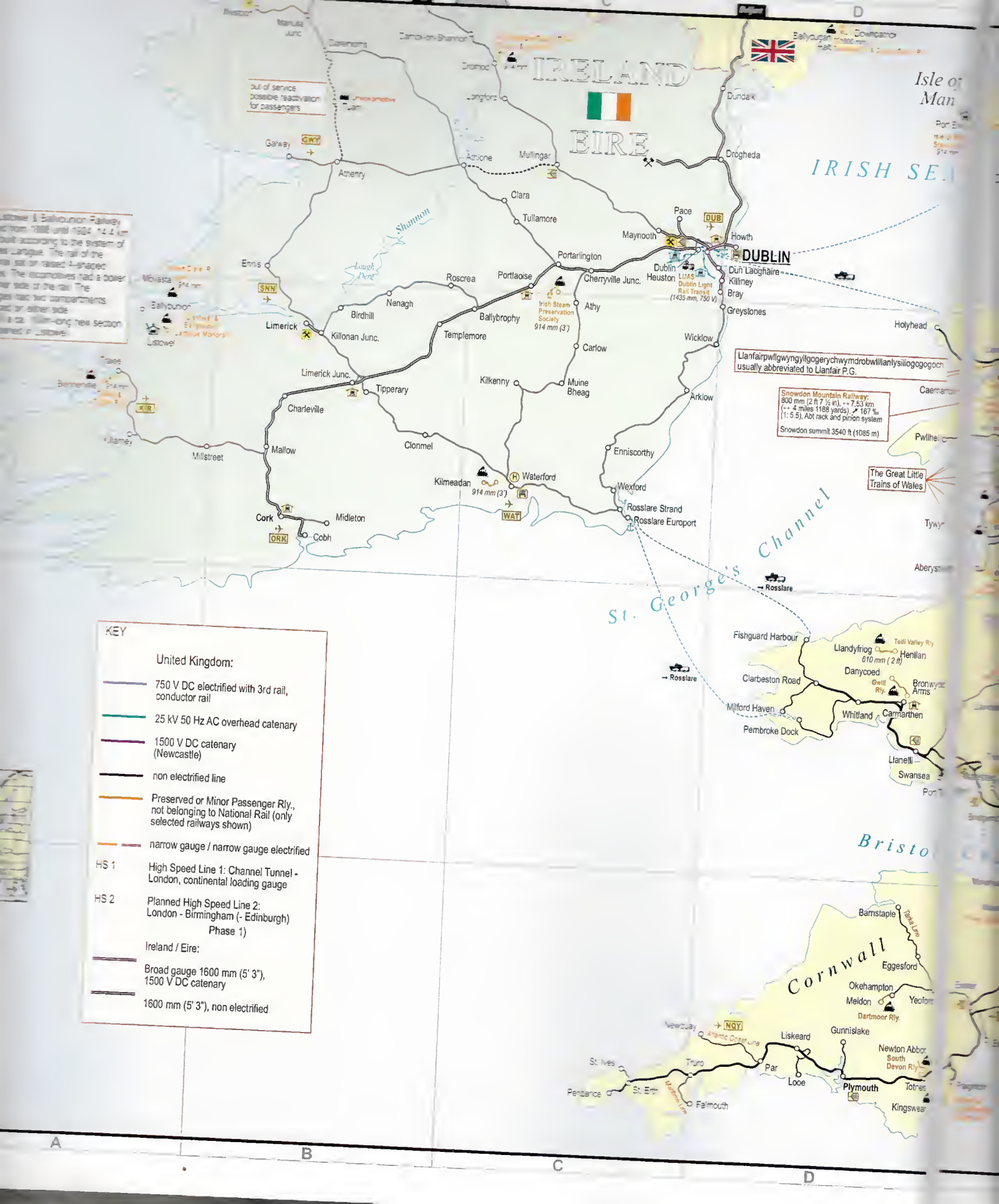
19

B York

Whitby

C

D



Limerick & Ballyvaughan Railway
from 1888 until 1984. 12.2 km
built according to the system of
the Limerick. The rail of the
rail set or raised 4-shaped
side of the rail. The
year had two compartments
and on either side
a 12.2 km-long new section
named in Limerick

out of service
possible reactivation
for passengers

Snowdon Mountain Railway:
800 mm (2 ft 7 1/2 in), 7.53 km
(4.7 miles 1188 yards), 167 %
(1:5.5), Abt rack and pinion system
Snowdon summit 3540 ft (1085 m)

Llanfairpwllgwyngyllgogerychwymdrobwlilanysiliogogogoch
usually abbreviated to Llanfair P.G.

KEY

United Kingdom:

750 V DC electrified with 3rd rail,
conductor rail

25 kV 50 Hz AC overhead catenary

1500 V DC catenary
(Newcastle)

non electrified line

Preserved or Minor Passenger Rly.,
not belonging to National Rail (only
selected railways shown)

narrow gauge / narrow gauge electrified

HS 1

High Speed Line 1: Channel Tunnel -
London, continental loading gauge

HS 2

Planned High Speed Line 2:
London - Birmingham (- Edinburgh)
Phase 1)

Ireland / Eire:

Broad gauge 1600 mm (5' 3"),
1500 V DC catenary

1600 mm (5' 3"), non electrified

Isle of Man

IRISH SEA

St. George's Channel

Bristol

Cornwall



NORTH SEA

ENGLAND

UNITED KINGDOM



LONDON

English Channel

La Manche



Bensbrücker Eisenbahn GmbH

AG

Eisenbahn AG

Eisenbahngesellschaft mbH

Bahn- und Dampfschiffahrt GmbH

Hauser Eisenbahn GmbH

Infrastrukturgesellschaft Aurich-Emden GmbH

ne Eisenbahn GmbH

und Verkehrsbetriebe Elbe-Weser GmbH

Eisenbahn-Verein e.V.

Harpstedter Eisenbahn GmbH

Regional Eisenbahn GmbH

Verkehrs- und Eisenbahngesellschaft mbH

er Eisenbahngesellschaft mbH

Nett GmbH

Vegetarischer Eisenbahn Gesellschaft mbH

urbahnen GmbH

Eisenbahn AG

ne Eisenbahngesellschaft Niebüll GmbH

GmbH

annoversche Eisenbahn AG

Gesellschaft mbH

Nord-Ost GmbH

ehr Ruhr-Lippe GmbH

ehr Münsterland GmbH

Baderbahn GmbH

chaft Landkreis Osnabrück

ebe Grafschaft Hoya GmbH

roder Eisenbahn GmbH

ne Landes-Eisenbahn GmbH

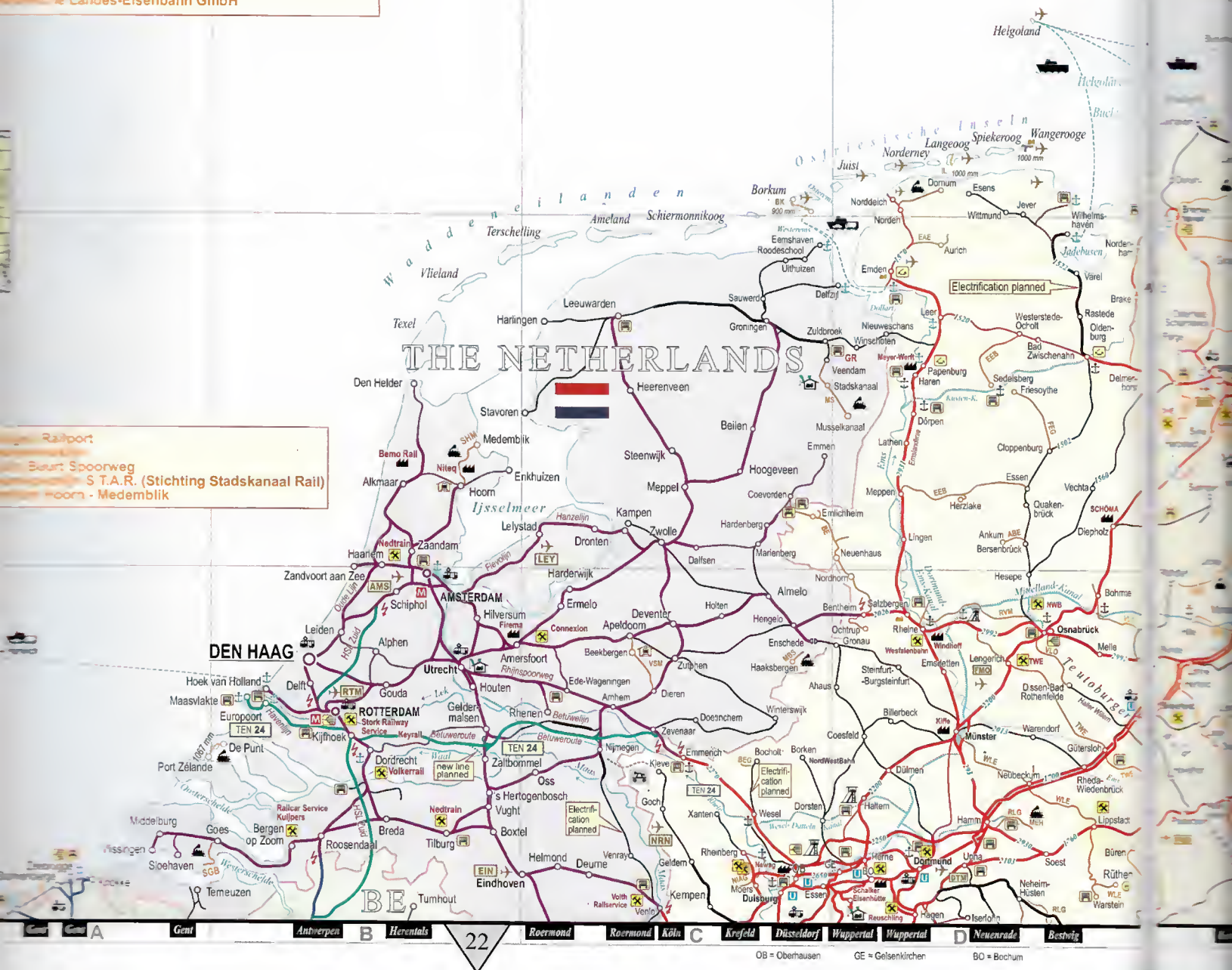
DJK = Dansk Jernbane Klub

RT = Regionstog A/S

VHV = Veteranbanen Haderslev - Vojens

VNJ = Vestbanen A/S

N O R T H S E A

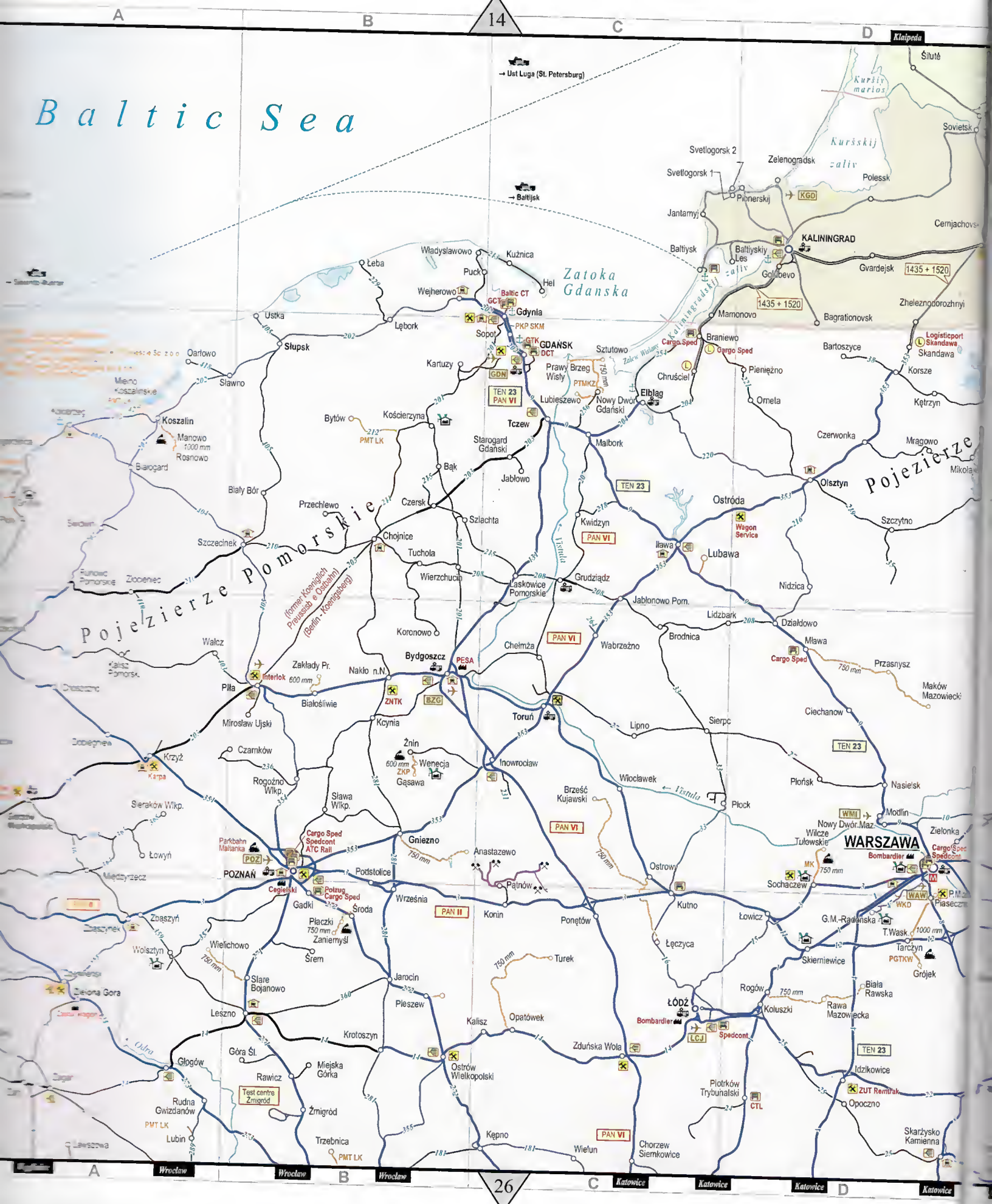






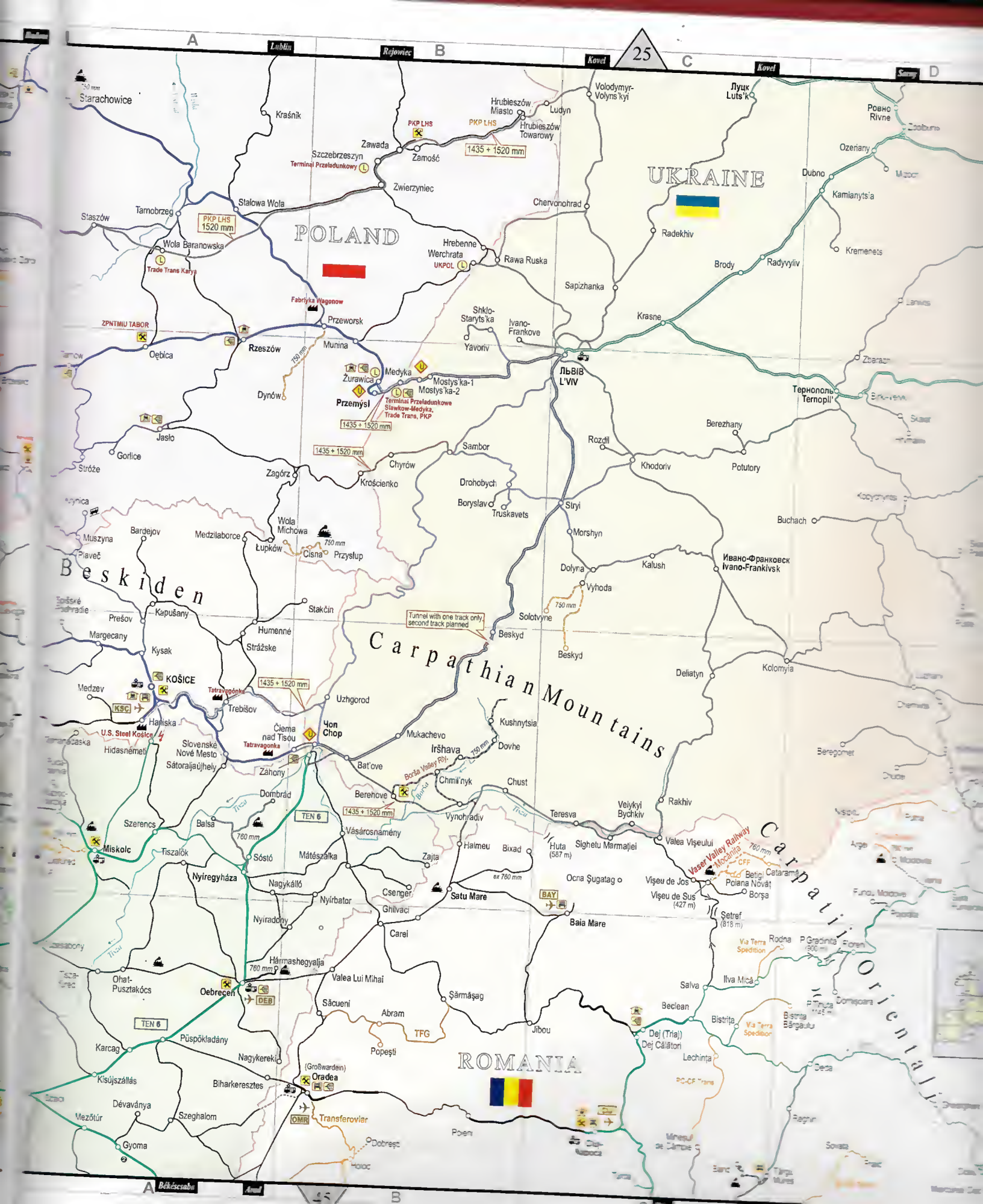


→ Ust Luga (St. Petersburg)











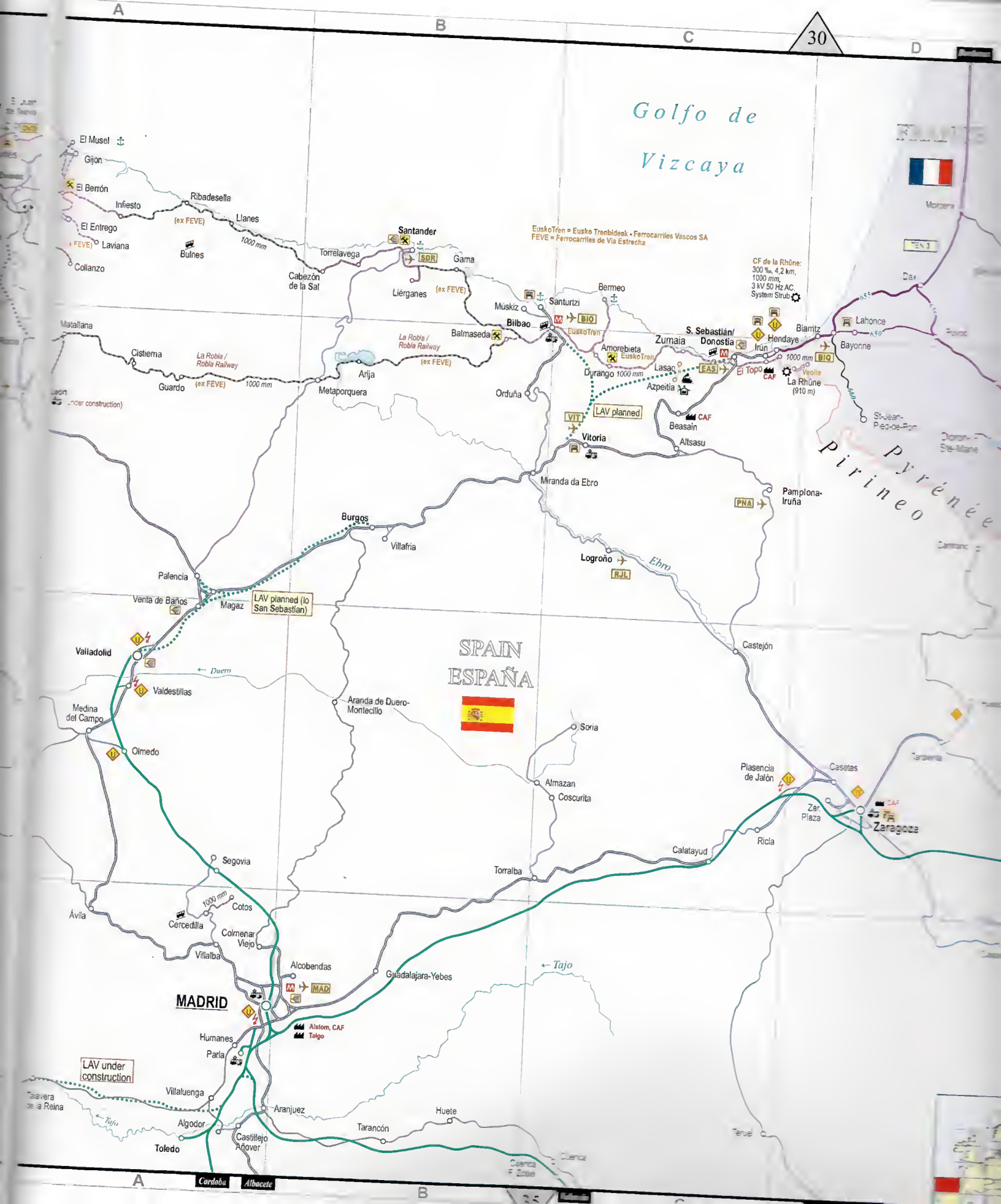


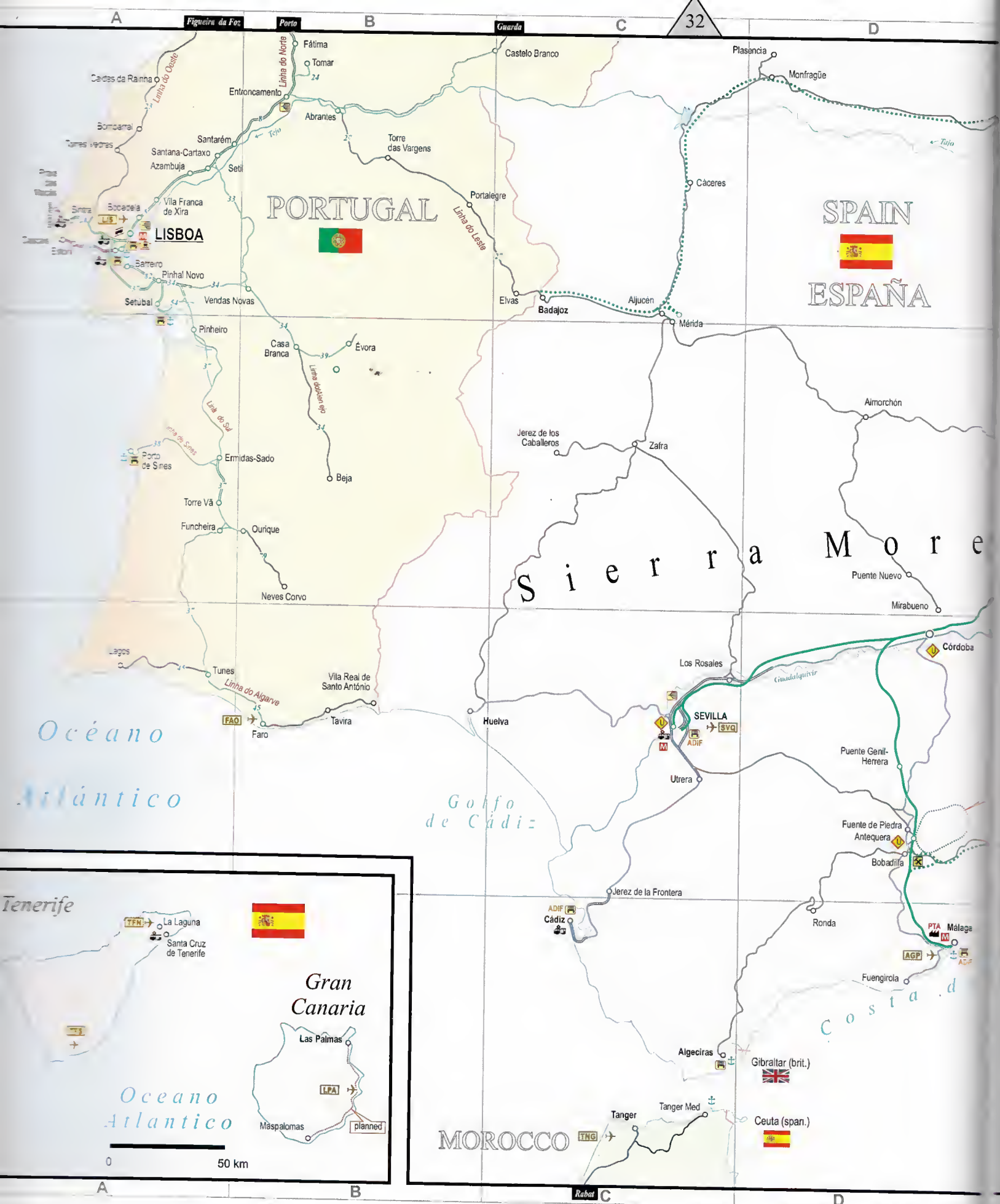


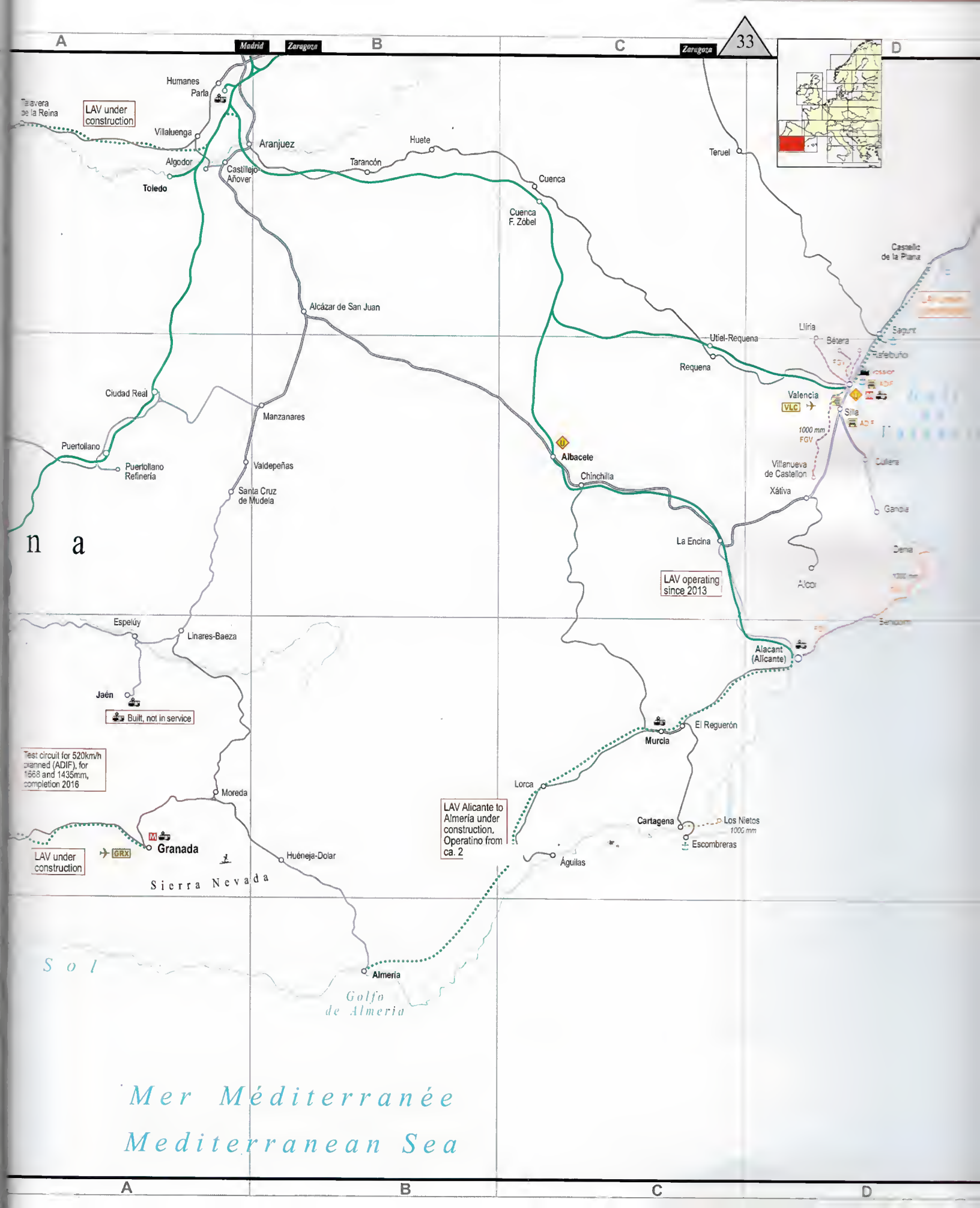




Golfo de Vizcaya









FEVE = Ferrocarril de la Via Estrecha
FGC = Ferrocarril de la Generalitat de Catalunya
FS = Ferrocarril de Sóller SA
SFM = Serveis Ferroviaris de Mallorca

→ Genova
→ Livorno
→ Civitavecchia

→ Alger
→ Palma de Mallorca
→ Tanger

FS 914 mm,
1200 V, DC

SFM 1000 mm,
1500 V, DC

Manacor - Artà reactivation
planned / under construction -
stopped after change of the
government

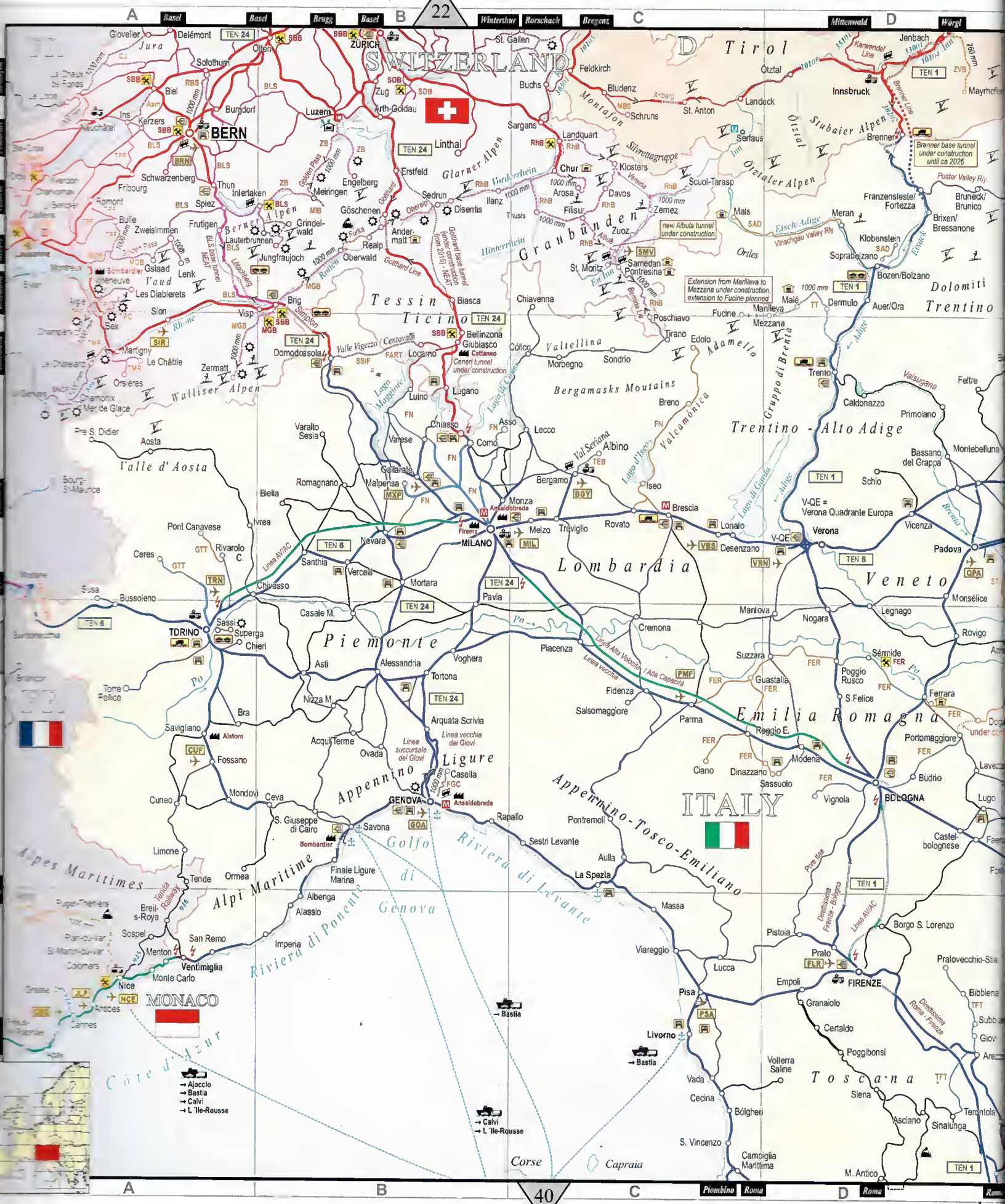


BARCELONA

🚋 + 🚊 TMB not shown

- KEY**
- double track line, 1435 mm, 25 kV AC, ADIF/RENFE
 - double track line, 1435 mm + 1668 mm, 3 kV DC, ADIF/RENFE
 - double track line, 1668 mm, 3 kV DC, ADIF/RENFE
 - single track line, 1668 mm, 3 kV DC, ADIF/RENFE
 - single track line, 1668 mm, goods traffic, ADIF/RENFE not electrified
 - double track line, 1435 mm, 1,5 kV DC FGC, in the urban area mostly underground. The FGC also operates 3 Metro lines in Barcelona (🚇 L6, L7, L8)
 - double track line, 1000 mm, 1,5 kV DC, FGC
 - single track line, 1000 mm, 1,5 kV DC, FGC
 - single track line, 1000 mm, FGC, not electrified, goods traffic only
 - single track line, 1000 mm end 1435 or 1668 mm
 - tram
 - funicular railway
 - cable car (teleferic)
 - works
 - container terminal
 - depot
 - change of voltage, e.g. 3 kV DC / 25 kV AC 50 Hz







- SLB = Salzburger Lokalbahn
- SRB = Südburgenländische Regionalbahn GmbH
- SILB = Steiermärkische Landesbahn
- ZVB = Zillertaler Verkehrsbetriebe AG
- GySEV = Győr-Sopron-Ebenfurti Vasút Zrt
- FER = Ferrovie Emilia Romagna Srl
- FUC = Ferrovie Udine Cividale Srl
- TFT = Trasporto Ferroviario Toscano SpA
- UM = Umbria Mobilità (ex FCU)



BOSNIA and HERZEGOVINA

CROATIA

Mare Adriatico

Puglia

Campania

Basilicata

Mare Ionico

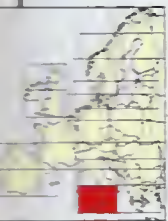
Electrification of the FSE line Bari - Putignano - Taranto for ca. 2017

- Dubrovnik (HR)
- Durres (AL)
- Igoumenitsa (GR)
- Kerkira (GR)
- Patra (GR)



- CV = Circumvesuviana Srl
 FAL = Ferrovie Appulo - Lucane Srl
 FdC = Ferrovie della Calabria Srl
 FCE = Ferrovia Circumetnea
 FdS = Arst Gestione FdS Srl (Ferrovie della Sardegna)
 FSE = Ferrovie del Sud Est e Servizi Automobilistici Srl
 FT = Ferrotramviaria SpA
 MCNE = MetroCampania NordEst Srl

Mare Tirreno



TUNISIA



TUNIS

Pantelleria





The Šargan Eight - an international heritage railway

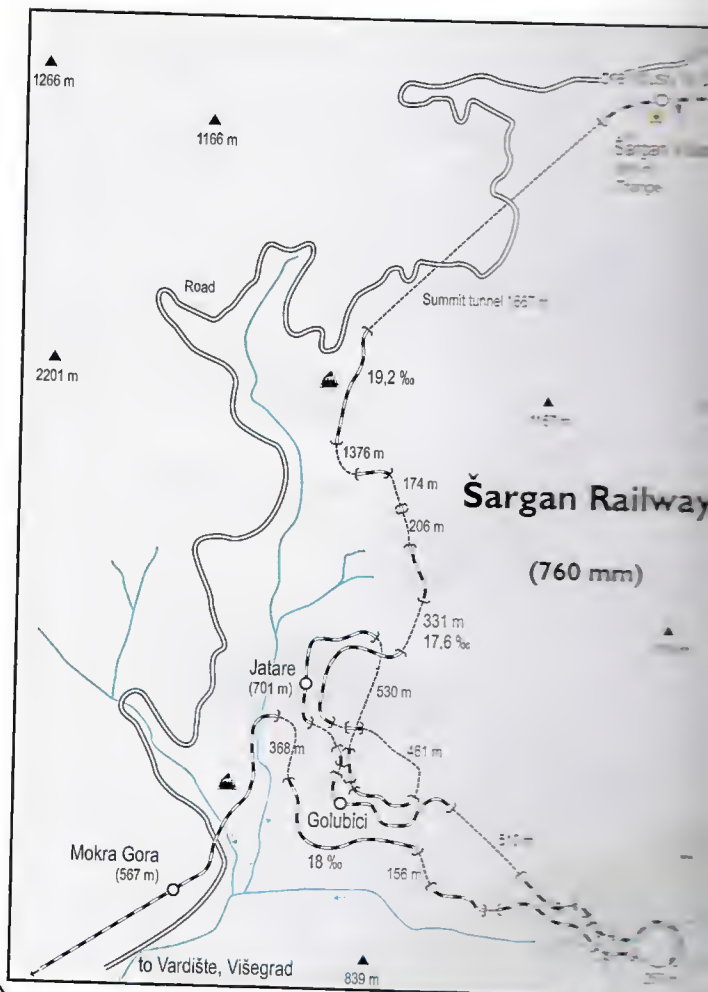
The Šargan Vitas - Mokra Gora - Višegrad railway line, rebuilt from 1999, was part of the former Dubrovnik - Mostar - Sarajevo - Belgrade narrow gauge railway line in western Serbia. The 57 km-long route was completed only in 1928 and connected the Sarajevo-Vardište Bosnian Eastern Railway, coming from Sarajevo, with Užice (formerly Titovo Užice) in Serbia.

The Kingdom of Serbs, Croats and Slovenes formed at the end of World War I pursued a number of projects to connect the individual narrow-gauge railways in Serbia with each other and with Sarajevo and the Adriatic Sea. The mountain route over Šargan pass was at the heart of long-distance routes in Yugoslavia. In addition to the express trains on the approximately 400 km long route connecting Belgrade to Sarajevo, there were through trains to Dubrovnik with dining and lounge cars as well as goods traffic from the area around Belgrade to the Adriatic.

After World War 2, new lines were built to standard gauge in Yugoslavia, including a faster northern Belgrade-Sarajevo connection. Part of the narrow gauge line at Užice was used for the connection of the new standard gauge line from Belgrade to the Adriatic port of Bar. To the west of Užice, a reservoir was created in the valley, submerging the route of the narrow gauge railway. The narrow gauge railway at the Šargan pass was finally decommissioned and dismantled in 1974.

In 1999 the Serbian Ministry of Tourism proposed the development of tourism in the Tara National Park (founded in 1981), including the rebuilt narrow gauge railway. In 2001, the first section was finished and train service began in 2003. And in 2010 the route was constructed over the border to Višegrad in Bosnia, making it one of the few international heritage railways.

A further extension to Kremna is under construction and there are plans to connect the railway with a new line to the Belgrade-Bar main line.













ALBANIA



GREECE



EPIRUS

THESSALY

Othrys

Kalidromo

Parnassos

PELOPONNESE

Chalkidiki

*Ionian
Sea*







COPENHAGEN KØBENHAVN

Østersøen
Baltic Sea

Malmö

Citytunnel
Citytunnels

Malmö Hyre

Mario Syc
Svobodnik



Rheinsberg

A

Neustrelitz

Templin

B

21

C

D

RIG

Grieben
(b. Granssee)

Herzberg (Mark)
(49 m)

Löwenberg (Mark)
(64 m)

Grüneberg

Groß Schönebeck
(Schorffelde)
(56 m)

Klandorf

Ruhisdorf
Zerpenschleuse (40 m)

Eberswalde

Bütze
Kremmener Rhin
Alter Rhin

Beetz-Sommerfeld

Nassenheide
(36 m)

Lottschensee

Ruppiner Kanal

Sachsenhausen
(Nordbahn)

Schmachten-
hagen

Zehlendorf
(Kr. Oranienburg)

Klosterfelde (50 m)

Kremmen (45 m)

Schwante

Vehlefanz

Bärenklau

Oranienburg

Wensickendorf

Basdorf
(61 m)

Biesenthal
(60 m)

Meinow

Brandenburg

Velten (Mark)

Borgsdorf

Birkenwerder
(b. Berlin)

Wandlitzsee

Wandlitz

Rüdnitz
28.2

Bernau (b. Berlin)
(67 m)

Bernau-Friedenstal

Hennigsdorf
(b. Berlin)

Schönwalde
(Kr. Nauen)

Schönwalde
(Barnim)

Zepernick
(b. Bernau)

Berlin-Buch

Werneuchen

BERLIN

not shown

Nauen (33 m)

Brieselang

Falkenhagen
(b. Nauen)

Finkenkrug

Falkensee

Seefeld

Berlin-Spandau

Schönholz

Pankow

Hohenschönhausen

Ahrensfelde

Ahrensfelde Nord 1

Ahrensfelde Friedhof

Wustermark

Wustermark
Rbf

Dallgow-
Döberitz

B-Staaken

Berlin-Staaken

Priort

Satzkom

Marquardt

Golm

P. Park
Sanssouci

P. Prinscheide

Potsdam Hbf

Potsdam-Medienstadt

Babelsberg

Potsdam-Rehbrücke

Genshagener
Heide

Struveshof

Saarmund

Michendorf

Saarmund

Saarmund

Saarmund

Saarmund

Saarmund

Saarmund

Saarmund

Westend

Westkreuz

Grünwald

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Jungfernheide

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Westend

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Gesundbrunnen

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Hbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Ostbf

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Lichten-
berg

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Bies-
dorfer Kreuz

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

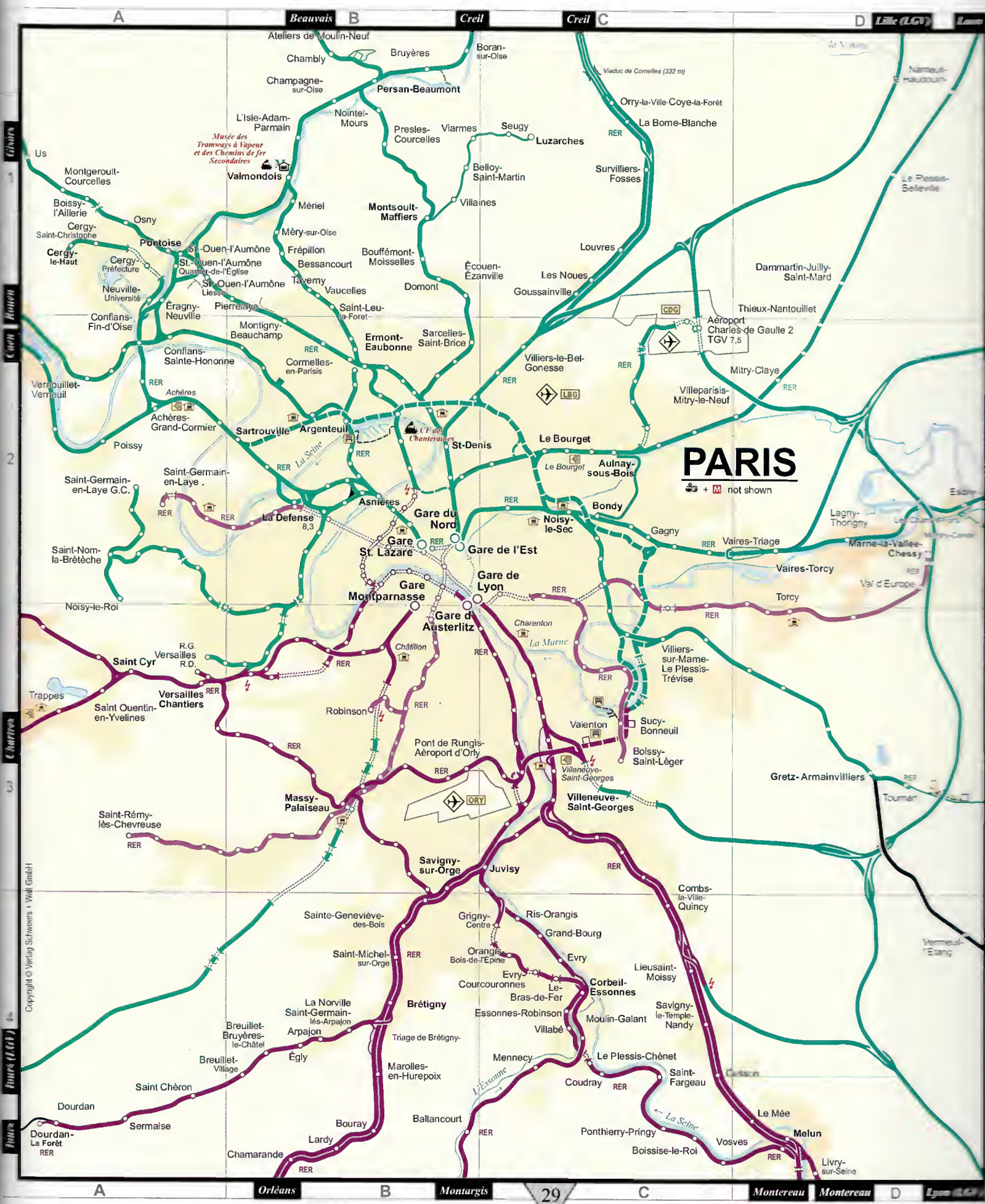
Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf

Berlin-
Kausdorf



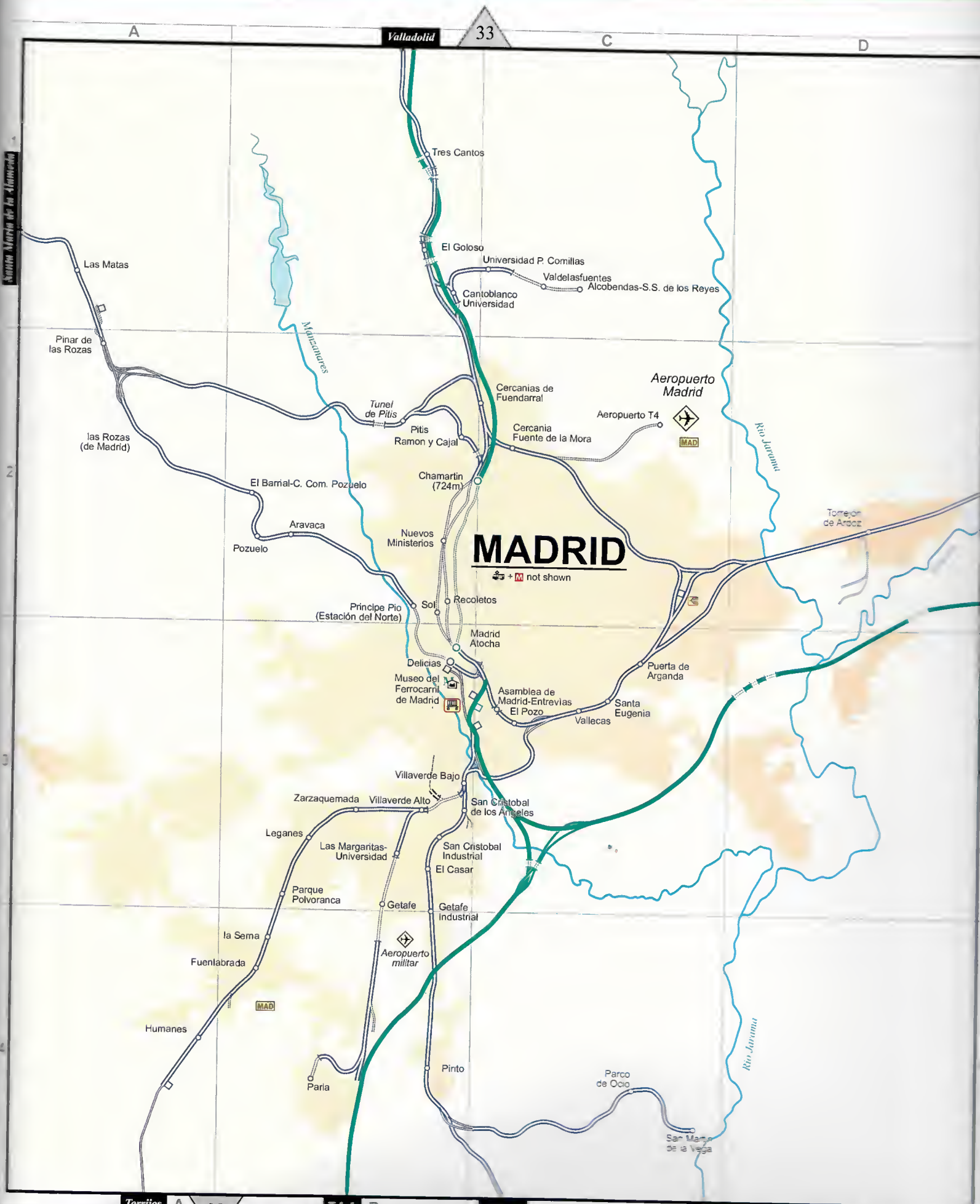


PARIS

not shown

Copyright © Verlag Schweitzer + Wall GmbH





Oceano
Atlântico



A

Retz

B

26

C

Mistelbach

D

Mistelbach

Sierndorf
(187 m)

Ober Olberndorf

Hausleiten

Stockerau (173 m)

Spillern

Leobendorf-
Burg Kreuzenstein
18.8Rückersdorf-
Harmannsdorf
(178 m)

Stetten

AB Pionierpark

AB Agrar-
speicher

AB Fetter

AB Flaga

Umspannwerk

Greifenstein-
AltenbergHöflein
a.d. DonauKorneuburg
(170 m)Korneuburg
Donaulände

Kritzendorf

Unter Kritzendorf

Klosterneuburg-
KierlingKlosterneuburg-
WeidlingKahlenberg
484 mHermannskogel
542 m

WIEN VIENNA

+ not shown
WLB not shownPurkersdorf-
Gablitz

10 %

Purkersdorf-
SenatoriumWiedlingau
WurzbechtalUnter
Purkersdorf
(243 m)Hadersdorf-
Weidlingau

Wien Hütteldorf

W Brettensee

Wien Westbf

W Penzing

W Meidling

W Spessing

Maxing

W Hetzendorf

W Atzgersdorf

W Liesing

Perchtoldsdorf

Perltmoos
Cement works

Waldmühle

Hochstüchel
473 mEichberg
558 mWürmlitz-
Hetzmannsdorf
(260 m)Wolkensdorf
(171 m)

Oberndorf

Gerasdorf

Kapellerfeld

Gerasdorf

W. Subart

W. Leopoldau

W Siemensstr

W Floridsdorf

W Stadlau

W. Erich-Karl-Str

W. Praterkai

W. Simmering

W. Zentralfriedhof

W. Kien-Schweiger

W. Mannsdorf

W. Kiedering

W. Blumental

W. Inzersdorf

W. Grillgasse

W. St. Marx

W. Rennweg

W. Nord-
westbfW. Nord-
bf

W. Handelskai

W. Oberdöbling

W. Krottenbachstr.

W. Gersthof

W. Hernals

W. Ottakring

W. Hütteldorf

W. Westbf

W. Meidling

W. Spessing

W. Hetzendorf

W. Atzgersdorf

W. Liesing

W. Perchtoldsdorf

W. Waldmühle

W. Eichberg

W. Hochstüchel

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

W. Purkersdorf-Senatorium

W. Hadersdorf-Weidlingau

W. Wiedlingau-Wurzbechtal

W. Unter Purkersdorf

W. Purkersdorf-Gablitz

